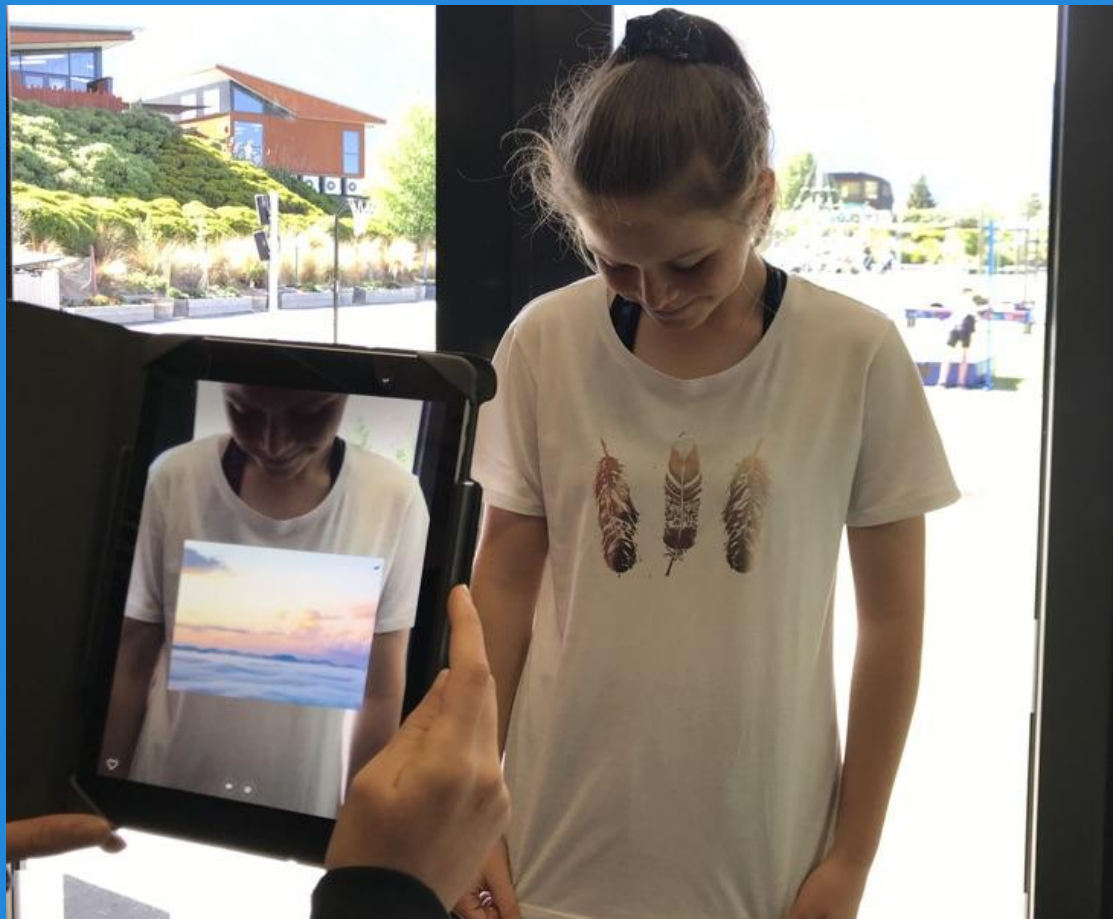# Local curriculum projects and digital technologies

Karakia Timatanga

Kia hora te marino
Kia whakapapa pounamu te moana
Hei huarahi mā tātou
i te rāngi nei
Aroha atu aroha mai
Tātou i a tātou katoa
Hui ē! Tāiki ē!

Opening Karakia
May peace be widespread
May the sea be like greenstone
A pathway for us all this day
Let us show respect for each other
For one another

Bind us all together

Local curriculum projects and digital technologies

Sarah Washbrooke

Technology and STEM Specialist

Remarkables Primary School

ICT Coordinator

Within School Lead teacher

Wakatipu Kāhui Ako (COL)

Member DTTA and TENZ Council

Webinar content outline

1. Strategies
2. What's engaging
3. Examples

Image by Jonny James, Storyworks, courtesy of LUMA Southern Light Project

Strategies for connecting with local community

- Local Facebook community groups
- Local papers
- Visiting other schools in area for collaborative work
- NZ technology teachers Facebook group
- Joining subject associations (TENZ/DTTA)
- Student voice (own and other students)
- Parent and community voice
- Use NPDL quadrants to plan deep learning inquiry

What is engaging about community connections

What I notice engages the students about community connections:

- Having an authentic, purposeful problem or issue to solve
- Having real stakeholders to talk to – and gain feedback
- The chance to show off their learning to others in the community and not just their parents
- Having a time deadline in which to complete the project
- Seeing their final outcomes used in real life
- Understanding they can help to change the future and make an impact on their world
- Not realising they are learning

Example 1: LUMA Light Festival, year 6

Technological Practice

LUMA, Queenstown 2017-19

- 2017: RPS students worked with Auckland University Biolab
- Designed 3D printed sea creatures that glowed with bioluminesence (DDDO), using TinkerCAD
- 2018/19: Worked with Wakatipu High School and Shotover Primary
- Created light installations linking to sustainability and promoting global issues

LUMA Light Festival

Image by Simon Holden, courtesy of LUMA Southern Light Project

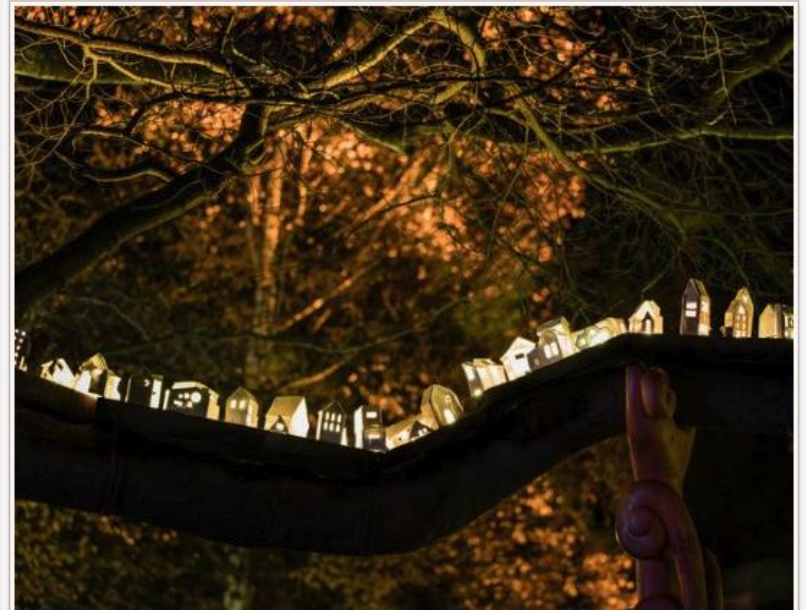Image by Simon Holden, courtesy of LUMA Southern Light Project

Image by Aiste Photography, courtesy of LUMA Southern Light Project
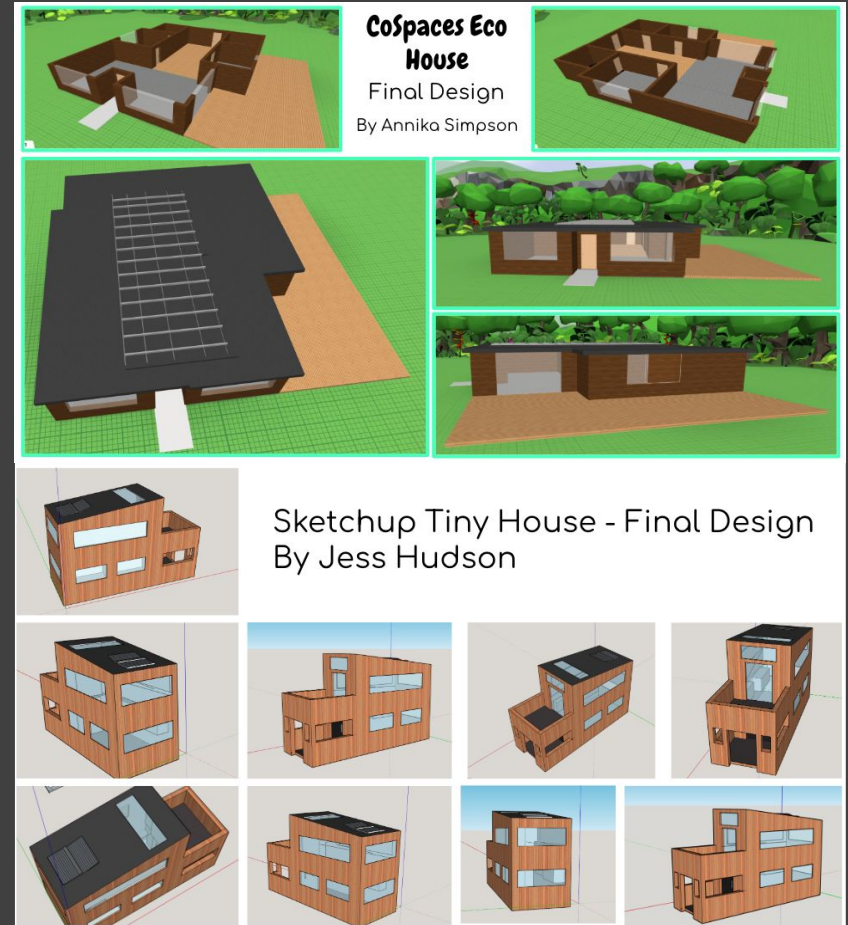
Example 2: Architectural design, year 8

Nature of Technology

Architectural design based on a local brief.

- Testing and trialling software to create floor plans and 3D models (DDDO)
- Creating a 3D model
- Impact of design outcomes on society and the environment
- Isometric sketching
- Working drawings

Example 3: Wakatipu landmark design, year 6

Technological Practice

Wakatipu Icons

- Collaborative research into a local town/community
- Designing a local feature to promote the town
- TinkerCAD (DDDO)
- Functional modelling through 3D printing
- Designing a poster to advertise the outcome (DDDO)
- Presentation to a local council member and younger RPS students
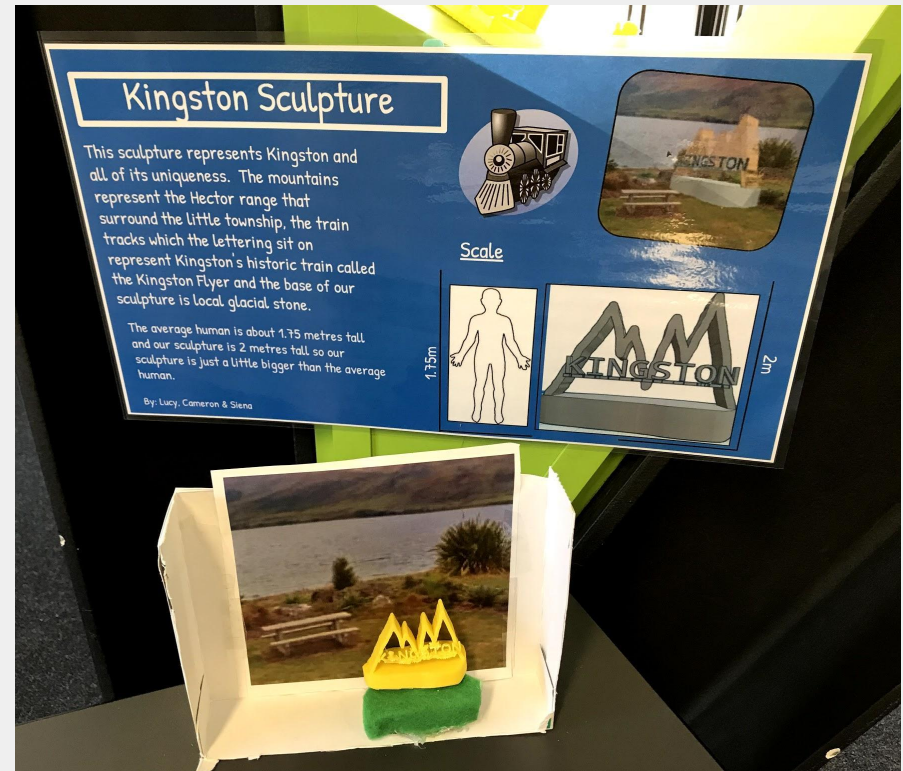
Example 4: Electric Garden, years 4–5

Computational Thinking

Code Club: Electric Garden

- Collecting statistical data from sensors in garden
- Analysis of data to help pumpkins grow
- Understanding areas of CT: algorithms, block & text based programming, IoT, inputs, & outputs, etc.
- Soil testing with Makey Makey
- Designing pumpkin costumes for competition

Integrated with beeswax wraps, bird feeders, and T-shirt bags for school carnival.

Other examples of local projects

Projects with digital technologies links

- TENZ Council thank you cards (DVC / Digital Media)
- Upcycling project: Reusing waste by 3D printing attachments
- Tahi Rua Toru Tech
- Games for learning: Digital game and app design linking to social studies
- Ministry of Inspiration: Aquabots
- Micro:bits – score keepers for school sport
- NZ Technology teachers Facebook banner (DVC / Digital Media)
- Educational animation and stop motion movies – highlighting local and global environmental issues

Other examples of local projects

Projects with other technological areas

- Wonder Project: Rockets
- Designing structures: Kawarau Falls Bridge
- Boomerang Bags
- Links to RPS: Older students designing outcomes for younger students, Enviroschools, whanaungatanga, food technology aprons, and master chef box.
- Lilliput library
- Schoolgen: Energy resources
- Food tech: Hospitality @ Hilton
- Enviroschool link – outcomes for gardens
- CREST projects

Technology Online resources

- [Digital technologies support](#)

- [Primary playground redesign – a rich local curriculum opportunity](#)

- [Exhibition sees artists from around the world stay at Parihaka marae](#)

Flying fox

As part of our main feature down the bank, we would like to include a safe and fun flying fox. We would like to place it going down on a diagonal where the old cross country track was.
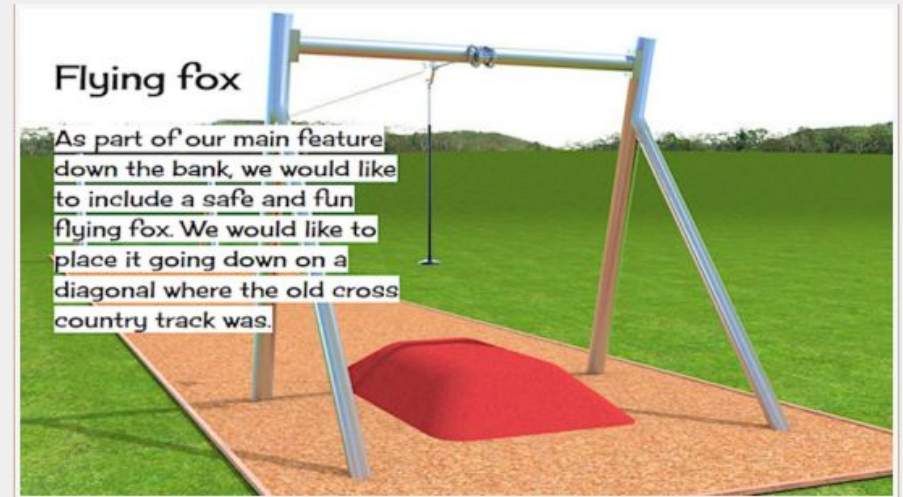
Technology Online newsletter

- **See the Technology Online newsletter here**

Karakia Whakamutunga

Ka whakairia te tapu
Kia watea ai te ara
Kia tūruki whakataha ai

Kia tūruki whakataha ai
Hui e Tāiki e

Restrictions are moved aside
So the pathway is clear
To return to everyday activities

Enriched and unified